

## Abstract

The following is disclosed: (1) a membrane fractionator including a filtration section, a concentrating section, a recovery section and a liquid feed pump, wherein a flow channel connecting the filtration section, concentrating section and recovery section to each other constitutes a closed circuitry; (2) a method of biocomponent separation, characterized in that a sample derived from biocomponents is fed into an antibody adsorption membrane separation system having an antibody capable of adsorbing specified protein internally accommodated in the middle or a rear part of a membrane separation system that in the absence of antibodies adsorbing proteins, exhibits a permeation ratio between human alpha1-microglobulin and human albumin of 1.5 to 1000, thereby separating part of the biocomponents; and (3) a method of protein fractionation, comprising bringing a solution containing two or more types of proteins and water into contact with a hollow yarn separation membrane to thereby attain protein fractionation, characterized in that the fractionation solution contains an organic solvent.